

SEARCH REQUEST FORM**Scientific and Technical Information Center**

Requester's full Name: Everett White Examiner #: 67057 Date: 5/13/2002
Art Unit: 1623 Phone Number 308-4621 Serial Number: 09/557.804
Mail Box: CM1-8B19 and Bldg/Room Location: CM1-7B13 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be search. Include the elected species or structures, key words, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: See Bib Data Sheet Point of Contact: Mona Smith
Inventors (please provide full names): See Bib Data Sheet Technical Information Specialist
CM1 6A01
Tel: 308 3278

Earliest priority Filing Date: See Bib Data Sheet

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search the method of preparing cellulose ethers of Claims 1-38 and 59, the carboxymethyl cellulose ether of claim 39, the methyl cellulose ether of Claim 40, the nonionic cellulose ether of Claim 41, ionic cellulose ether of Claim 42, the cotton linter pulp of claim 43, softwood kraft pulp of Claim 44, the hardwood kraft pulp of Claim 45, the wood pulp of Claim 46, the method of preparing cellulose floc of Claims 47-52, the cellulose floc product of Claims 53 and 55-58, and the method of preparing mercerized cellulose floc of Claim 54. A copy of the claims and abstract is provided.

The Bib Data Sheet which discloses the inventor names, title of the invention, and the earliest priority filing date is also provided.

Point of Contact:
Mona Smith
Technical Information Specialist
CM1 6A01
308 3278

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>H. Smith</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: <u>308-3278</u>	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: <u>4/25/02</u>	Bibliographic <u>X</u>	Dr. Link _____
Date Completed: <u>5/22/02</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>55</u>	Fulltext _____	Sequence Systems _____
Clerical prep time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>45</u>	Other _____	Other (specify) _____

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FILE COVERS 1907 - 22 May 2002 VOL 136 ISS 21
FILE LAST UPDATED: 20 May 2002 (20020520/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d stat que
L1 7014 SEA FILE=REGISTRY CELLULOSE/BI
L2 3349 SEA FILE=REGISTRY CELLULOSE(L)ETHER?
L5 317314 SEA FILE=HCAPLUS L1 OR CELLULOSE
L6 52195 SEA FILE=HCAPLUS L2 OR CELLULOSE(W)ETHER?
L10 3334 SEA FILE=HCAPLUS L5(W) (PULP? OR FLOC?) (L) (COTTON(W)LINTER? OR
HARDWOOD? OR SOFTWOOD? OR SULFITE OR KRAFT OR REHYDRAT?)
L11 30 SEA FILE=HCAPLUS L10 AND MERCER?
L12 2 SEA FILE=HCAPLUS L11 AND L6

=> d ibib abs hitrn l12 1-2

L12 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:353497 HCAPLUS
TITLE: Cellulose ethers and method of
preparing the same
INVENTOR(S): Harding, Roger Bruce; Crenshaw, Susan L. H.; Gregory,
Paul Eugene; Broughton, Denise Hartnett
PATENT ASSIGNEE(S): BKI Holding Corporation, USA
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036636	A1	20020510	WO 2001-US45482	20011031
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2000-245037P P 20001101

AB The present invention have discovered that the solution rheology of **cellulose ethers** prepared from **cellulose pulp** is altered by **mercerizing** and recovering **cellulose pulp** before preparing the **cellulose ethers**. For example, the solution viscosity of carboxymethyl cellulose (CMC) produced from **mercerized** and recovered **cellulose pulp** is significantly greater than that produced from **mercerized** and recovered **cellulose pulp** is significantly greater than that produced from non-**mercerized** cellulosed pulp. The present invention provides a method of preparing **cellulose ethers** comprising the steps of (a) obtaining **mercerized** and recovered **cellulose pulp**, and (b) recovered **cellulose pulp** into the **cellulose ethers**. According to one embodiment, the **cellulose pulp** is southern **softwood kraft** and the **mercerized cellulose pulp** has a TAPPI 230 om-89 viscosity of at most 12 cP. This method, however, may be applied to all **cellulose pulps**, regardless of their viscosities, including those which, when **mercerized**, have a viscosity greater than 12 cP. The **mercerized cellulose pulp** is typically substantially free of cellulose III. **Mercerized cellulose pulp** prepared by this method has a greater percentage of crystalline cellulose II and a smaller crystalline area than that of non-**mercerized cellulose pulp**. The present invention also provides a method of preparing a **cellulose floc** comprising the steps of (a) obtaining **mercerized** and recovered **cellulose pulp**, and (b) treating the **mercerized pulp** to form the **cellulose floc**. Alternatively, the method comprises **mercerizing** and recovering a **cellulose floc**. **Cellulose floc** prepared by this method have a greater bulk density than **cellulose floc** prepared from similar non-**mercerized cellulose pulp**. Furthermore, the bulk density gain is greater than that expected from the coarseness (weight per unit of fiber length) gain from preparing a **cellulose floc**.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:772828 HCAPLUS
DOCUMENT NUMBER: 133:336721
TITLE: **Cellulose ethers, pulps and flocs**
and preparation thereof with viscosity control
INVENTOR(S): Harding, Roger Bruce; Crenshaw, Susan L. H.; Gregory,
Paul Eugene; Broughton, Denise Hartnett
PATENT ASSIGNEE(S): BKI Holding Corporation, USA
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000065145	A1	20001102	WO 2000-US11283	20000426
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
NO 2001005196	A	20011227	NO 2001-5196	20011024
PRIORITY APPLN. INFO.:			US 1999-131092P	P 19990426
			WO 2000-US11283	W 20000426

AB **Cellulose ethers** are prepd. by (a) obtaining **mercerized** and recovered **cellulose pulp**, and (b) converting the **mercerized** and recovered **cellulose pulp** into the **cellulose ethers**. When the **cellulose pulp** is southern **softwood kraft**, the **mercerized cellulose pulp** has a TAPPI 230 om-89 viscosity greater than 12 cP. **Mercerized cellulose pulp** prepd. by this method has a greater percentage of cryst. cellulose II and a smaller cryst. area than that of nonmercerized **cellulose pulp**. **Cellulose floc** is prepd. by (a) obtaining **mercerized** and recovered **cellulose pulp** that is substantially free of cellulose III, and (b) treating the **mercerized pulp** to form the **cellulose floc**. Thus, **cotton-linter pulp** (3% consistency) was **mercerized** 15 min with 216 g/L 18% NaOH at 25.degree., bleached with hypochlorite 50 min at 50.degree., washed, treated with H2SO4 and oxalic acid, formed into sheets, dried, and ground, giving floc having av. length 0.45, d. 0.152 g/mL, water retention 65.9%, cellulose II 62%, and crystallinity 46%. The floc (40-50 g) was soaked in water overnight, stirred with aq. iso-PrOH, alkalinized with 50% aq. NaOH, mixed with monochloroacetic acid soln. in iso-PrOH, heated 1.5 h at 75.degree., and washed, giving CMC having degree of substitution 0.794 and Brookfield viscosities 1713 cP (0.50% aq. soln.), 6387 cP (0.75% aq. soln.), and 83,745 cP (1% aq. soln.), compared with 0.825, 754, 2751, and 34,690, resp., without **mercerization**.

IT 9004-32-4P, Sodium-CMC 9004-67-5P, Methyl cellulose
RL: IMF (Industrial manufacture); PREP (Preparation)
(cellulose ethers, pulps and flocs and prepn.
thereof with viscosity control)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d stat que

L1 7014 SEA FILE=REGISTRY CELLULOSE/BI
L2 3349 SEA FILE=REGISTRY CELLULOSE(L)ETHER?
L3 1 SEA FILE=REGISTRY "SODIUM MONOCHLOROACETATE"/CN
L5 317314 SEA FILE=HCAPLUS L1 OR CELLULOSE
L6 52195 SEA FILE=HCAPLUS L2 OR CELLULOSE(W)ETHER?
L7 1461 SEA FILE=HCAPLUS L3 OR SODIUM(W)MONOCHLOROACETATE?
L10 3334 SEA FILE=HCAPLUS L5(W) (PULP? OR FLOC?) (L) (COTTON(W)LINTER? OR
HARDWOOD? OR SOFTWOOD? OR SULFITE OR KRAFT OR REHYDRAT?)
L11 30 SEA FILE=HCAPLUS L10 AND MERCER?
L12 2 SEA FILE=HCAPLUS L11 AND L6
L13 1 SEA FILE=HCAPLUS L10 AND ETHER? AND L7
L14 1 SEA FILE=HCAPLUS L13 NOT L12

=> d ibib abs hitrn l14

L14 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:184146 HCAPLUS

DOCUMENT NUMBER: 126:173005

TITLE: Biodegradable polyester nonwoven composite fabrics
with high hygroscopicity

INVENTOR(S): Myoshi, Tomoji; Tashiro, Izumi; Ikezawa, Hideo

PATENT ASSIGNEE(S): Oji Paper Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09003757	A2	19970107	JP 1995-147668	19950614

AB The nonwoven fabrics are prepd. by melt spinning thermoplastic aliph. polyesters contg. units of biodegradable glycols and and aliph. dicarboxylic acids or derivs. thereof to form spunbonded nonwoven webs, laminating one side of the webs with paper sheets comprising cellulose pulp fibers contg. crosslinked carboxyalkl groups in the mol. chain, and spraying high-pressure water onto paper side of the laminate. The nonwovens are useful for agricultural materials, food preservation materials, building materials, disposable diapers, and sanitary products (no data). Bionolle (aliph. polyester) was melt spun at 220.degree., made into a spunbonded nonwoven fabric, laminated with kraft pulp paper, and sprayed with a high-pressure water jet to give a nonwoven fabric composite, which was impregnated with an aq. soln.

contg. NaOH 8.38, Na monochloroacetate 24.40, and ethylene glycol diglycidyl ether 0.68%, dried, and heated at 50.degree. for 3 h to give a composite nonwoven fabric exhibiting water absorption 51 g/g and complete decompn. after 6 mo in soil.

IT 3926-62-3DP, Sodium monochloroacetate, reaction products with pulp fibers, polymers with ethylene glycol diglycidyl ether
 RL: AGR (Agricultural use); BPR (Biological process); BUU (Biological use, unclassified); FFD (Food or feed use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (biodegradable polyester nonwoven fabric composites with crosslinked carboxyalkyl-modified pulp fiber sheets with high hygroscopicity)

=> d stat que

L1 7014 SEA FILE=REGISTRY CELLULOSE/BI
 L2 3349 SEA FILE=REGISTRY CELLULOSE(L)ETHER?
 L3 1 SEA FILE=REGISTRY "SODIUM MONOCHLOROACETATE"/CN
 L5 317314 SEA FILE=HCAPLUS L1 OR CELLULOSE
 L6 52195 SEA FILE=HCAPLUS L2 OR CELLULOSE(W)ETHER?
 L7 1461 SEA FILE=HCAPLUS L3 OR SODIUM(W)MONOCHLOROACETATE?
 L10 3334 SEA FILE=HCAPLUS L5(W) (PULP? OR FLOC?) (L) (COTTON(W)LINTER? OR HARDWOOD? OR SOFTWOOD? OR SULFITE OR KRAFT OR REHYDRAT?)
 L11 30 SEA FILE=HCAPLUS L10 AND MERCER?
 L12 2 SEA FILE=HCAPLUS L11 AND L6
 L13 1 SEA FILE=HCAPLUS L10 AND ETHER? AND L7
 L15 28 SEA FILE=HCAPLUS L11 NOT (L12 OR L13)
 L16 1 SEA FILE=HCAPLUS L15 AND ETHER?

=> d ibib abs hitrn l16

L16 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1983:541800 HCAPLUS
 DOCUMENT NUMBER: 99:141800
 TITLE: Highly reactive cellulose
 INVENTOR(S): Sears, Karl D.
 PATENT ASSIGNEE(S): International Telephone and Telegraph Corp., USA
 SOURCE: U.S., 5 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4399275	A	19830816	US 1982-337447	19820106
FI 8300038	A	19830707	FI 1983-38	19830106
FI 69311	B	19850930		
FI 69311	C	19860110		
CA 1184904	A1	19850402	CA 1983-418999	19830106
PRIORITY APPLN. INFO.:			US 1982-337447	19820106

AB **Mercerization of cellulose pulp with NaOH**
followed by hydroxyalkylation with ethylene oxide [75-21-8] or propylene oxide (I) [75-56-9] gave products highly reactive to acetylation. Thus, 1955 g never-dried **sulfite** pulp was treated with a soln. of H₂O 12,914, 30% H₂O₂ 5.2 and 19.3% NaOH 15,155 g for 10 min at 23-24.degree., and 294 g portion of the treated pulp was **etherified** with 16 g I for 2 h at 50.degree. to give hydroxypropylated pulp in .apprx.95% yield with 4.4% hydroxypropoxy content. Acetylation of this pulp in the presence of 1.4% H₂SO₄ for 154 min at 19.degree. gave corresponding acetate with low haze value.

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Set	Items	Description
S1	646	CELLULOSE(S)MERCERI?
S2	478	RD (unique items)
S3	27	S2 AND ETHER?

?t3/3 ab/1-27

>>>No matching display code(s) found in file(s): 342

3/AB/1 (Item 1 from file: 34)
 DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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02778565 Genuine Article#: MC172 Number of References: 38
 Title: CHEMICAL MODIFICATION OF CELLULOSE IN A SUPERBASE MEDIUM (Abstract Available)
 Author(s): ZHDANOV YA; ALEKSEEV YE; ALEKSEEVA VG
 Corporate Source: ROSTOV STATE UNIV, INST PHYS & ORGAN CHEM, STACHKI PR
 194-3/ROSTOV NA DONU 344104//RUSSIA/
 Journal: VYSOKOMOLEKULYARNYE SOEDINENIYA SERIYA A & SERIYA B, 1993, V35, N9
 (SEP), PA1436-A1441
 ISSN: 0507-5475
 Language: RUSSIAN Document Type: ARTICLE

Abstract: A simple method of chemical modification of cellulose is proposed here. This method is based on the 'hydrophobic mercerization' of cellulose in a superbase medium [such as the dimethyl sulfoxide (DMSO)-solid sodium hydroxide mixture] followed by O-alkylation (or acylation). Methyl sulfate, benzyl chloride, acetic anhydride, methyl bromoacetate, triethyleneglycol ditosylate, and p-toluenesulfonyl (tosyl) chloride were used as the alkylating (acylating) agents. This method appreciably simplifies the production of acetyl- and methoxycarbonylmethylcellulose. The latter is subsequently used to introduce coronand and podand moieties into the cellulose polymer chain. O-Tosylation results in the formation of anhydroderivatives. O-Alkylation with triethyleneglycol ditosylate gives derivatives with podand fragments and a marked ability to bind potassium ions. A qualitative method for detecting this ability in insoluble polymers is suggested. It offers an opportunity to obtain the available polymer phase-transfer catalysts with potential enantioselective activity.

3/AB/2 (Item 2 from file: 34)
 DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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02019895 Genuine Article#: JU137 Number of References: 12
 Title: STUDIES OF CARBOXYMETHYLCELLULOSE .1. STRUCTURAL-CHANGES OF THE COTTON FIBERS DURING THE CARBOXYMETHYLATION PROCESS (Abstract Available)
 Author(s): TURAYEV AS; KHUDAYBERGANOVA ZA; TYAGAY ED; YUSUNOV MY; BURKHANOVA MD; TASHPULATOV YT
 Corporate Source: VI LENIN STATE UNIV, INST COTTON/TASHKENT/UZBEKISTAN/USSR/ ; VI LENIN STATE UNIV, INST CELLULOSE CHEM & TECHNOL/TASHKENT/UZBEKISTAN/USSR/
 Journal: CELLULOSE CHEMISTRY AND TECHNOLOGY, 1992, V26, N1 (JAN-FEB), P 33-52
 ISSN: 0576-9787

Language: RUSSIAN Document Type: ARTICLE

Abstract: Researches on the cotton cellulose structure and properties (medical bandage), during carboxymethylation to various degrees of substitution, were made up. Structural changes valued on data of X-ray diffractometry, IR-spectroscopy, electron microscopy, sorption, DP, and degree of swelling of samples. Carboxymethylation including mercerization and particularly etherification drives to visible decreasing of DP, increasing of cellulose solubility in alkali solutions and sorption ability. The degree of swelling in water grows with the degree of substitution and reaches about 200 at DS = 30. Data of raster and electron microscopy show the visible decreasing of fiber twisting and the appearance of thickenings. The fiber surface is smoothed, the fibrillarity of structure of the second wall being revealed. Swelling of microfibrils and their adhesion with each other in finely divided preparations occur. At a high DS, the fiber disturbance to fine unstructural layers takes place. After cellulose etherification, crystallites obtained by hydrolysis are essentially diminished. The changes of feature of interaction between the structural elements and their inner organization are revealed on the ultrafine sections of the modified fibers. The state of carboxymethylated bandage in living organisms at implantation and its resolving are conditioned by these structural changes.

3/AB/3 (Item 1 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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01227898 AADMM61306

ETHERIFICATIONS A L'AIDE D'OXIRANES DE CELLULOSES MERCERISEES OU
DESTRUCTUREES AVEC L'ETHYLENEDIAMINE (FRENCH TEXT)

Author: ROULEAU, GENEVIEVE

Degree: M.SC.A.

Year: 1990

Corporate Source/Institution: UNIVERSITE DE SHERBROOKE (CANADA) (0512)

Source: VOLUME 30/03 of MASTERS ABSTRACTS.

PAGE 813. 117 PAGES

ISBN: 0-315-61306-8

La cellulose est un polymere naturel dont les proprietes en font un support ideal pour le relargage controle de medicaments (ou de pesticides) ainsi que dans l'immobilisation de substrats.

L'obtention d'une matrice cellulosique de type cellulose -bras activateur constituait le premier objectif de ce projet de recherche ou l'augmentation de l'accessibilite des hydroxyles de la cellulose suivie de la fixation de groupements activateurs en etaient les deux etapes principales. La destructureation de la cellulose commerciale Sigma s'est effectuee avec deux agents de gonflement: l'ethylenediamine et l'hydroxyde de sodium, dont l'action sur la cellulose est appelee traditionnellement " mercerisation ".

Dans une premiere partie, la cellulose traitee avec l'ethylenediamine fut lavee avec du 1,4-dioxane pour eliminer l'exces de diamine et ensuite reagie avec deux groupements activateurs bifonctionnels, l'epichlorohydrine (ECH) et le 1,4-butanediol diglycidylether (bisoxirane).

Dans une seconde partie, quatre methodes de mercerisation, dont deux en laboratoire et deux en reacteur, furent comparees au niveau de l'augmentation de l'accessibilite des hydroxyles, causee par le traitement avec la soude, mesuree a l'aide du taux de fixation de l'ECH. (Abstract shortened by UMI.)

3/AB/4 (Item 1 from file: 94)
 DIALOG(R)File 94:JICST-EPlus
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00709470 JICST ACCESSION NUMBER: 88A0592348 FILE SEGMENT: JICST-E
 The physical properties of thermoplastic from coffee bean parchment.
 YANO SHOICHIRO (1); HIROSE SHIGEO (1); KASUGA KAZUYUKI (1); HATAKEYAMA HYOE
 (1)

(1) Industrial Products Res. Inst.
 Seihin Kagaku Kenkyujo Kenkyu Hokoku(Bulletin of Industrial Products
 Research Institute), 1988, NO.111, PAGE.19-24, FIG.6, TBL.3, REF.6
 JOURNAL NUMBER: S0032ABW ISSN NO: 0389-9659
 UNIVERSAL DECIMAL CLASSIFICATION: 678.5/.8
 LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
 DOCUMENT TYPE: Journal
 ARTICLE TYPE: Original paper
 MEDIA TYPE: Printed Publication

ABSTRACT: Thermoplastic was obtained from coffee bean parchment which is
 agroindustrial waste in tropical countries. Parchment with low
 crystallinity (ca. 27%) was benzylated at 110.DEG.C after
 mercerization . The tensile strength and elongation of benzylated
 parchment films were ca. 42MPa and 5%, respectively. These values were
 higher than those of a polystyrene film which is widely used for
 various industrial products. The glass transition temperature was
 80-88.DEG.C depending on the reaction conditions. Thermogravimetric
 analysis was carried out and it was found that benzylation improved the
 heat resistance of cellulose . The dynamic viscoelasticity of
 benzylated parchment was also measured and in addition to a primary
 relaxation at about 120.DEG.C a secondary transition was observed at
 about -50.DEG.C having the activation energy of 109.4kJ/mol. The
 benzylated parchment was found to have excellent characteristics
 similar to those of high performance polymers.(author abst.)

3/AB/5 (Item 1 from file: 342)
 DIALOG(R)File 342:Derwent Patents Citation Indx
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04208906 WPI Acc No: 01-031690/04
 Preparation of cellulose ethers, useful as thickening agents, adhesives and
 protective colloids, comprises conversion of mercerized and recovered
 cellulose pulp -

Patent Assignee: (BKIH-) BKI HOLDING CORP
 Author (Inventor): HARDING R B; CRENSHAW S L H; GREGORY P E; BROUGHTON D H
 Patent (basic)

Patent No Kind Date Examiner Field of Search
 WO 200065145 A1 001102 (BASIC)

Derwent Week (Basic): 0104

Priority Data: US 131092P (990426)

Applications: AU 200048040 (000426); WO 2000US11283 (000426)

Designated States

(National): AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR;
 CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; HR; HU; ID; IL; IN; IS; JP
 ; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW;
 MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ
 ; UA; UG; US; UZ; VN; YU; ZA; ZW
 (Regional): AT; BE; CH; CY; DE; DK; EA; ES; FI; FR; GB; GH; GM; GR; IE;
 IT; KE; LS; LU; MC; MW; NL; OA; PT; SD; SE; SL; SZ; TZ; UG; ZW

Derwent Class: A11; F09

Int Pat Class: C08B-011/14; C08B-011/16; C08B-011/20

Number of Patents: 002

Number of Countries: 089
 Number of Cited Patents: 002
 Number of Cited Literature References: 000
 Number of Citing Patents: 000

3/AB/6 (Item 1 from file: 351)
 DIALOG(R) File 351:Derwent WPI
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014006394
 WPI Acc No: 2001-490608/200154
 XRAM Acc No: C01-147411

Textile treatment, useful in preventing the back-staining of denim during the stone washing of denim articles, comprises treating the textile with a solution or dispersion of a hydrophobically modified polymer

Patent Assignee: NAT STARCH & CHEM INVESTMENT HOLDING COR (NATT);

RODRIGUES K A (RODR-I)

Inventor: RODRIGUES K A

Number of Countries: 028 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1101857	A2	20010523	EP 2000123390	A	20001031	200154 B
AU 200071592	A	20010517	AU 200071592	A	20001114	200154
CA 2326569	A1	20010516	CA 2326569	A	20001116	200154
US 20010034911	A1	20011101	US 99441714	A	19991116	200168
			US 2001881269	A	20010614	
US 6337313	B1	20020108	US 99441714	A	19991116	200211

Priority Applications (No Type Date): US 99441714 A 19991116; US 2001881269 A 20010614

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1101857	A2	E	16	D06M-015/21	
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT					
LI LT LU LV MC MK NL PT RO SE SI					
AU 200071592	A			D06M-015/21	
CA 2326569	A1	E		D06M-015/21	
US 20010034911	A1			D06P-003/52	Div ex application US 99441714
US 6337313	B1			C11D-003/37	

Abstract (Basic): EP 1101857 A2

Abstract (Basic):

NOVELTY - Textile treatment comprises treating the textile with a solution or dispersion of a hydrophobically modified polymer (1) containing a hydrophilic backbone (2) and at least one hydrophobic moiety (3). The hydrophobic backbone (2) is prepared from at least one monomer, a polymerizable hydrophilic cyclic monomer, and non-ethylenically unsaturated polymerizable hydrophilic cyclic monomer.

DETAILED DESCRIPTION - Textile treatment comprises treating the textile with a solution or dispersion of a hydrophobically modified polymer (1) that contains a hydrophilic backbone (2) and at least one hydrophobic moiety (3).

The hydrophilic backbone (2) is prepared from (i) at least one monomer selected from ethylenically unsaturated hydrophilic monomer selected from 1-6C acid, amide, ether, alcohol, aldehyde, anhydride, ketone or ester; (ii) a polymerizable hydrophilic cyclic monomer; and (iii) a non-ethylenically unsaturated polymerizable hydrophilic monomer selected from glycerol and/or other polyhydric alcohols.

The hydrophilic backbone (2) is optionally substituted with at least one amino, amine, amide, sulfonate, sulfate, phosphonate,

hydroxy, carboxyl or oxide groups.

The hydrophobic moiety (3) is prepared from at least one hydrophobic monomer or a chain transfer agent. The hydrophobic monomer is selected from a siloxane, optionally saturated alkyl and hydrophobic alkoxy group, aryl and aryl-alkyl group, alkyl sulfonate and/or aryl sulfonate. The chain transfer agent is selected from 1-24 (preferably 3-18)C mercaptan, 1-24C amine and/or 1-24C alcohol.

The hydrophobically modified polymer (1) is present in an amount of 0.001-50 wt.% based on the total weight of the solution or dispersion.

An INDEPENDENT CLAIM is also included for the prevention of backstaining of denim during stonewashing by treating the denim with the solution or dispersion of (1).

USE - (1) is useful in preventing the back-staining of denim during the stone washing of denim articles (claimed).

ADVANTAGE - The hydrophobically modified polymer (1) binds with indigo dye or indigo cellulose complex and prevents them from redeposition on the denim. (1) helps stabilize hydrogen peroxide in the bleaching process, reduces scale and prevents deposition of heavy metal ions e.g. iron, calcium and magnesium during scouring, desizing, mercerizing and bleaching processes. (1) disperses direct and dispersed dyes and suspends unfixed dyes and thus provides a consistent and level dyeing of textiles.

pp; 16 DwgNo 0/0

3/AB/7 (Item 2 from file: 351)
DIALOG(R)File 351:Derwent WPI
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013849900

WPI Acc No: 2001-334113/200135

XRAM Acc No: C01-103010

Purification of crude carboxymethylcellulose for wood pulp and linter pulp, involves treating carboxymethylcellulose containing residual organic solvent with organic solvent aqueous solution, dehydrating and drying

Patent Assignee: DAICEL CHEM IND LTD (DAIL)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001106701	A	20010417	JP 99281651	A	19991001	200135 B

Priority Applications (No Type Date): JP 99281651 A 19991001

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001106701	A		5	C08B-011/22	

Abstract (Basic): JP 2001106701 A

Abstract (Basic):

NOVELTY - A mercerized cellulose is esterified using monochloro sodium acetate solvent to form crude carboxymethylcellulose (CMC). The crude CMC containing residual organic solvent is treated with organic solvent aqueous solution, dehydrated and dried to form pure CMC.

USE - As raw material for manufacturing cellulose such as wood pulp and linter pulp.

ADVANTAGE - The content of residual organic solvent in CMC is reduced sharply. The crude CMC is purified efficiently.

pp; 5 DwgNo 0/0

3/AB/8 (Item 3 from file: 351)
 DIALOG(R)File 351:Derwent WPI
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013547484

WPI Acc No: 2001-031690/200104

XRAM Acc No: C01-009605

Preparation of cellulose ethers, useful as thickening agents, adhesives and protective colloids, comprises conversion of mercerized and recovered cellulose pulp

Patent Assignee: BKI HOLDING CORP (BKI-H-N)

Inventor: BROUGHTON D H; CRENSHAW S L H; GREGORY P E; HARDING R B

Number of Countries: 089 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200065145	A1	20001102	WO 2000US11283	A	20000426	200104 B
AU 200048040	A	20001110	AU 200048040	A	20000426	200109
NO 200105196	A	20011227	WO 2000US11283	A	20000426	200221
			NO 20015196	A	20011024	

Priority Applications (No Type Date): US 99131092 P 19990426

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200065145 A1 E 46 D21C-003/02

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200048040 A D21C-003/02 Based on patent WO 200065145

NO 200105196 A D21C-000/00

Abstract (Basic): WO 200065145 A1

Abstract (Basic):

NOVELTY - A method of preparing cellulose ethers (I) comprises (A) obtaining mercerized and recovered cellulose pulp (II) and (B) converting (II) into (I) where the cellulose pulp is mercerized with a cellulose II mercerizing agent and (II) has a viscosity (TAPPI 230 om-89) greater than 12 cP, when the cellulose pulp is a southern softwood kraft.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for the cellulose ether (I).

USE - The method is useful for the preparation of cellulose ethers for use as thickening agents, bonding agents and protective colloids.

ADVANTAGE - The method has an increased throughput and the solution viscosity of the cellulose ethers may be controlled by process conditions.

pp; 46 DwgNo 0/2

3/AB/9 (Item 4 from file: 351)
 DIALOG(R)File 351:Derwent WPI
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013438106

WPI Acc No: 2000-610049/200058

XRAM Acc No: C01-007900

Modified cellulose product for drilling oil-, gas- and water wells, comprises cation and ligand in addition to cellulose ether, or xanthan gum product

Patent Assignee: METSA SPECIALTY CHEM OY (METS-N)
 Inventor: KLOOW G; MAAS A F; RUPPERT O; KLOOW G E
 Number of Countries: 028 Number of Patents: 005
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
NO 200001336	A	20000918	NO 20001336	A	20000315	200058 B
EP 1038937	A1	20000927	EP 2000660053	A	20000315	200104
FI 9900585	A	20000917	FI 99585	A	19990316	200062
BR 200001330	A	20010320	BR 20001330	A	20000316	200123
US 6303544	B1	20011016	US 99394711	A	19990913	200164

Priority Applications (No Type Date): FI 99585 A 19990316

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
NO 200001336	A			C09K-007/02	
EP 1038937	A1	E	9	C09K-007/02	
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT					
LI LT LU LV MC MK NL PT RO SE SI					
FI 9900585	A			C08L-001/26	
BR 200001330	A			C08L-001/02	
US 6303544	B1			C09K-007/02	

Abstract (Basic): EP 1038937 A1

Abstract (Basic):

NOVELTY - The modified cellulose product comprises cellulose ether, or xanthan gum product, and salts of metal cation and substituted nitrilo acetic acid or amino acetic acid as ligand, for improving viscosity thermostability and shale inhibiting effect.

DETAILED DESCRIPTION - The modified cellulose product comprises cellulose ether (such as carboxymethyl cellulose, hydroxyethyl cellulose, carboxymethyl hydroxyethyl cellulose, methyl cellulose, hydroxyethyl methyl cellulose or ethyl hydroxyethyl cellulose), or xanthan gum product. It further comprises salts of aluminum-, ferro-, ferri-, zinc-, nickel-, tin(2)- or tin(4)-cations, and nitrilo-tri-acetic acid, 1,2-cyclo-hexan-di-amin-N,N,N',N'-tetra-acetic acid, di-ethylen-tri-amine-penta-acetic acid, ethylen-di-oxy-bis(ethylen-nitrilo)-tetra-acetic acid, (N-(2-hydroxy-ethyl)-ethylen-diamin-N,N',N', tri-acetic acid, tri-ethylen-tetra-amine-hexa-acetic acid or N-(hydroxyethyl) ethylene-di-amine-tri-acetic acid as a ligand.

An INDEPENDENT CLAIM is also included for the preparation of modified cellulose product by reacting cellulose with salts of metal-cations and with ligands.

USE - For drilling mud (claimed) in subterranean oil-, gas- and water wells.

ADVANTAGE - The product has shale inhibiting effect, viscosifying effect, fluidity loss reducing effect and thermostability improving effect in water based drilling-, completion- and work-over fluid.

pp; 9 DwgNo 0/0

3/AB/10 (Item 5 from file: 351)
 DIALOG(R)File 351:Derwent WPI
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012890840

WPI Acc No: 2000-062674/200005

Related WPI Acc No: 2000-062673

XRAM Acc No: C00-017461

Hydrophobic modified cellulose ethers suitable used in detergent, paper, coating mixtures, paints, dispersing agents, and oil drilling muds

Patent Assignee: METSA SPECIALTY CHEM OY (METS-N)

Inventor: GOSSELINK E P; KAENKOENEN H; KLOOW C; LAEHTEENMAEKI M; LEUP J A;
OLIVER R; KAEHKOENEN H; KLOOW G; LEUPIN J A; RUPPERT O

Number of Countries: 087 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9961479	A1	19991202	WO 99FI296	A	19990408	200005 B
AU 9933344	A	19991213	AU 9933344	A	19990408	200020
EP 998498	A1	20000510	EP 99914585	A	19990408	200027
			WO 99FI296	A	19990408	
CZ 200000624	A3	20000816	WO 99FI296	A	19990408	200048
			CZ 2000624	A	19990408	
BR 9906504	A	20000926	BR 996504	A	19990408	200051
			WO 99FI296	A	19990408	
ZA 200000301	A	20010425	ZA 2000301	A	20000124	200128
HU 200100160	A2	20010628	WO 99FI296	A	19990408	200143
			HU 2001160	A	19990408	

Priority Applications (No Type Date): FI 981149 A 19980525

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9961479	A1	E	15	C08B-013/00	
Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW					
AU 9933344	A			C08B-013/00	Based on patent WO 9961479
EP 998498	A1	E		C08B-013/00	Based on patent WO 9961479
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT RO SE					
CZ 200000624	A3			C08B-013/00	Based on patent WO 9961479
BR 9906504	A			C08B-013/00	Based on patent WO 9961479
ZA 200000301	A		38	C08B-000/00	
HU 200100160	A2			C08B-013/00	Based on patent WO 9961479

Abstract (Basic): WO 9961479 A1

Abstract (Basic):

NOVELTY - Modified hydrophobic cellulose ether is prepared reacting a cellulose ether or its derivatives with an alkyl or alkenylketene dimer.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a detergent composition containing a modified hydrophobic cellulose ether.

USE - For preparing modified hydrophobic cellulose ethers.

ADVANTAGE - The modified cellulose ether is easy to manufacture. The process is safe, simple, and quick. The modified cellulose ether has improved its dispersibility in water which is suitable for use in any water-based applications.

pp; 15 DwgNo 0/0

3/AB/11 (Item 6 from file: 351)

DIALOG(R)File 351:Derwent WPI

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012890839

WPI Acc No: 2000-062673/200005

Related WPI Acc No: 2000-062674

XRAM Acc No: C00-017460

Preparation of hydrophobic modified cellulose ethers suitable used in

detergent, paper, coating mixtures, paints, dispersing agents and oil drilling muds

Patent Assignee: METSA SPECIALTY CHEM OY (METS-N)

Inventor: KAEHKOENEN H; KLOOW G; LAEHTENMAEKI M; RUPPERT O

Number of Countries: 086 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9961478	A1	19991202	WO 99FI295	A	19990408	200005 B
FI 9801149	A	19991126	FI 981149	A	19980525	200009
AU 9934223	A	19991213	AU 9934223	A	19990408	200020
CN 1272116	A	20001101	CN 99800835	A	19990408	200112
FI 107385	B1	20010731	FI 981149	A	19980525	200146
KR 2001022029	A	20010315	KR 2000700597	A	20000119	200159

Priority Applications (No Type Date): FI 981149 A 19980525

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9961478 A1 E 14 C08B-013/00

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN
CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK
SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

FI 9801149 A C08B-000/00

AU 9934223 A C08B-013/00 Based on patent WO 9961478

CN 1272116 A C08B-013/00

FI 107385 B1 C08B-013/00 Previous Publ. patent FI 9801149

KR 2001022029 A C08B-013/00

Abstract (Basic): WO 9961478 A1

Abstract (Basic):

NOVELTY - Modified hydrophobic cellulose ether is prepared by reacting a cellulose ether or its derivatives with an alkyl or alkenylketene dimer.

USE - For preparing modified hydrophobic cellulose ethers used in detergent, paper, coating mixtures, paints, dispersing agents and oil drilling muds

ADVANTAGE - The modified cellulose ether is easy to manufacture. The process is safe, simple, and quick. The modified cellulose ether has improved its dispersibility in water which is suitable for use in any water-based applications.

pp; 14 DwgNo 0/0

3/AB/12 (Item 7 from file: 351)

DIALOG(R)File 351:Derwent WPI

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010773063

WPI Acc No: 1996-270016/199628

XRAM Acc No: C96-085919

Wetting compsn. for mercerising baths - contains a polyhydroxy-amide or - ether cpd., esp. an alkyl-carboxamido-glycoside cpd., and a phosphate ester

Patent Assignee: CIBA GEIGY AG (CIBA); CIBA SC HOLDING AG (CIBA); CIBA SPECIALTY CHEM HOLDING INC (CIBA); CIBA SPECIALTY CHEM CORP (CIBA)

Inventor: MAIER T; STEHLIN A

Number of Countries: 010 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
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EP 716180	A1	19960612	EP 95810744	A	19951129	199628	B
JP 8209530	A	19960813	JP 95319862	A	19951208	199642	
US 5709810	A	19980120	US 95567614	A	19951205	199810	

Priority Applications (No Type Date): CH 943725 A 19941208

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 716180 A1 G 11 D06M-011/40

Designated States (Regional): BE CH DE ES FR GB IT LI

JP 8209530 A 6 D06M-011/38

US 5709810 A 8 D06M-013/256

Abstract (Basic): EP 716180 A

Mergerising wetting compsns. (I) contain (a) a cpd. of formula (1): and (b) a phosphate ester of formula (2): R1 = OH or SO3M; R2 = 4-18C alkyl; R3 = 1-10C alkoxy or a gp. of formula R5-O(CH2CH2O)p- (2a); R4 = -OM or R3; R5 = 1-10C alkyl; M = H or alkali metal; m = 2-6; n = 1 or 0; p = 1-8. Also claimed is a method for reducing the prodn. of foam in the recovery of alkali hydroxide from mercerising wash baths, by adding a compsn. (I) to the bath.

USE - Used for the mercerisation of cellulose -contg. fibre materials (claimed).

ADVANTAGE - Provides compsns. with a good wetting action in mercerising baths and a good foam suppressant action, esp. in alkali hydroxide recovery (see above).

Dwg.0/0

Abstract (Equivalent): US 5709810 A

Mergerising wetting compsns. (I) contain (a) a cpd. of formula (1): and (b) a phosphate ester of formula R3R4P(OM)(=O) (2): R1 = OH or SO3M; R2 = 4-18C alkyl; R3 = 1-10C alkoxy or a gp. of formula R5-O(CH2CH2O)p- (2a); R4 = -OM or R3; R5 = 1-10C alkyl; M = H or alkali metal; m = 2-6; n = 1 or 0; p = 1-8. Also claimed is a method for reducing the prodn. of foam in the recovery of alkali hydroxide from mercerising wash baths, by adding a compsn. (I) to the bath.

USE - Used for the mercerisation of cellulose -contg. fibre materials (claimed).

ADVANTAGE - Provides compsns. with a good wetting action in mercerising baths and a good foam suppressant action, esp. in alkali hydroxide recovery (see above).

Dwg.0/0

3/AB/13 (Item 8 from file: 351)
 DIALOG(R)File 351:Derwent WPI
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009451834

WPI Acc No: 1993-145359/199318

XRAM Acc No: C93-064842

Mixed cellulose ether with high solubility in water - prepd. by reacting cellulose ether with an etherifying agent to give good flow properties and clarity

Patent Assignee: DAICEL CHEM IND LTD (DAIL); DAICEL LTD (DAIL)

Inventor: KATO Y; KIYOSE A

Number of Countries: 005 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 539979	A2	19930505	EP 92118504	A	19921029	199318	B
JP 5117301	A	19930514	JP 91282881	A	19911029	199324	
EP 539979	A3	19930908	EP 92118504	A	19921029	199509	
US 5463037	A	19951031	US 92967385	A	19921028	199549	

			US 94252537	A	19940601	
EP 539979	B1	19970115	EP 92118504	A	19921029	199708
DE 69216756	E	19970227	DE 616756	A	19921029	199714
			EP 92118504	A	19921029	
JP 3002916	B2	20000124	JP 91282881	A	19911029	200009

Priority Applications (No Type Date): JP 91282881 A 19911029

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 539979	A2	E	54	C08B-011/193	
	Designated States (Regional): DE FR NL				
JP 3002916	B2		3	C08B-011/193	Previous Publ. patent JP 5117301
JP 5117301	A		3	C08B-011/193	
US 5463037	A		4	C08B-011/193	Cont of application US 92967385
EP 539979	B1	E	5	C08B-011/193	
	Designated States (Regional): DE FR NL				
DE 69216756	E			C08B-011/193	Based on patent EP 539979
EP 539979	A3			C08B-011/193	

Abstract (Basic): EP 539979 A

A process for producing a mixed cellulose ether comprises reacting either successively or continuously: (A) a starting cellulose ether contg. a first substit. and comprising at least 18 mol.% of a 6-substd. glucose unit and at least 15 mol.% of an unsubstd. glucose unit; with (B) an etherifying agent.

(A) comprises 18-50 mol.% of a 6-substd. glucose unit and 15-40 mol.% of an unsubstd. glucose unit. Most pref. (A) is a hydroxyethyl cellulose (HEC). (A) is prepd. by mercerisation of cellulose in an aq. phase having an alkali concn. of 35-50 wt.% for 30 mins. pref. 30 mins.-2hrs.. The subsequent etherification is conducted at 50 deg. C or higher for not more than 150 mins. and in the presence of not more than 0.5 mol. of an alkali per mol. of glucose unit.

USE/ADVANTAGE - Provides an increased utilisation of the etherifying reagent and produces a mixed cellulose ether having a high solubility in water and whose aq. soln. have improved properties such as flow and clarity. These mixed cellulose ethers are useful as dispersion stabilisers in the coatings, cosmetics and engineering fields, and as controlled release agents of humectants in the medical field

Dwg. 0/0

Abstract (Equivalent): EP 539979 B

A process for producing a mixed cellulose ether comprising reacting a starting cellulose ether containing a first substituent with an etherifying agent in the presence of not more than 0.5 mol of an alkali per mol of glucose unit either successively or continuously, wherein said starting cellulose ether comprises at least 18 mol.% of a 6-substituted glucose unit (an anhydrous glucose unit of cellulose having a substituent only at the 6-position thereof) and at least 15 mol.% of an unsubstituted glucose unit.

Dwg. 0/0

Abstract (Equivalent): US 5463037 A

Prod. of mixed cellulose ether comprises reacting a starting cellulose ether contg. a 1-3C alkyl substit. with an etherifying agent successively or continuously. The starting cellulose ether comprises 18+(10-50) mole.% of a 6-substd. glucose unit and 15+((15-40) mole.% of an unsubstd. glucose unit.

Pref. starting cellulose ether is hydroxyethyl- cellulose or hydroxypropyl- cellulose. Pref. starting material is prepd. by mercerisation of cellulose in 25-50% aq. alkali for 30 mins.-4hrs. followed by etherification at 50+ deg. C for not more than 150 mins., (30 mins.-2 hrs.). Reaction mixt. has below 0.5 mol. alkali/mol. glucose. Alkyl substit. is 1-3C hydroxy alkyl, carboxy alkyl, unsubstd.

alkyl or cationic hydroxy alkyl.

USE - In cosmetics, food, engineering, coatings and pharmaceuticals. The mixt. so obtd. has high solubility in water, giving soln. with good flow properties and clarity.

(Dwg.0/0)

3/AB/14 (Item 9 from file: 351)
DIALOG(R) File 351:Derwent WPI
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009375511

WPI Acc No: 1993-068989/199309

XRAM Acc No: C93-030586

Chlorine-free, crosslinked long chain alkylpolyamine polymer mfr. - by reacting polyacid crosslinker with e.g. polypolybutenylketone useful as dispersant

Patent Assignee: BP CHEM LTD (BRPE); BP CHEM SNC (BRPE)

Inventor: BLACKBOROW J R

Number of Countries: 010 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 529979	A1	19930303	EP 92307672	A	19920821	199309 B
FR 2680791	A1	19930305	FR 9111018	A	19910830	199318
US 5254669	A	19931019	US 92934928	A	19920825	199343
JP 5255516	A	19931005	JP 92232303	A	19920831	199344

Priority Applications (No Type Date): FR 9111018 A 19910830

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 529979	A1	E	54	C08F-008/46	

Designated States (Regional): BE DE ES FR GB IT NL SE

FR 2680791	A1	10	C08F-008/32
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US 5254669	A	4	C08G-069/26
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JP 5255516	A	5	C08J-003/24
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Abstract (Basic): EP 529979 A

A process for producing a mixed cellulose ether comprises reacting either successively or continuously: (A) a starting cellulose ether contg. a first substit. and comprising at least 18 mol.% of a 6-substd. glucose unit and at least 15 mol.% of an unsubstd. glucose unit; with (B) an etherifying agent.

(A) comprises 18-50 mol.% of a 6-substd. glucose unit and 15-40 mol.% of an unsubstd. glucose unit. Most pref. (A) is a hydroxyethyl cellulose (HEC). (A) is prepd. by mercerisation of cellulose in an aq. phase having an alkali concn. of 35-50 wt.% for 30 mins. pref. 30 mins.-2hrs.. The subsequent etherification is conducted at 50 deg. C or higher for not more than 150 mins. and in the presence of not more than 0.5 mol. of an alkali per mol. of glucose unit.

USE/ADVANTAGE - Provides an increased utilisation of the etherifying reagent and produces a mixed cellulose ether having a high solubility in water and whose aq. soln. have improved properties such as flow and clarity. These mixed cellulose ethers are useful as dispersion stabilisers in the coatings, cosmetics and engineering fields, and as controlled release agents of humectants in the medical field

Dwg.0/0

Abstract (Equivalent): US 5254669 A

A crosslinked polymer is obtd. by reacting (A) the organic crosslinking agent polycarboxylic acid (deriv.) with (B) a polyamine, other than a succinimide, contg. a 10800 C alkyl chain and at least 2

prim. or sec. functional amine gps..

The polyamine is pref. produced by (a) ozonising a polyolefin, esp. a polybutene, to produce a long chain alkylcarbonyl and (b) reacting this alkylcarbonyl with an amine. The polycarboxylic acid is oxalic, malonic, succinic, glutaric, adipic or pimelic acid or EDTA.

USE/ADVANTAGE - Used as additive to lubricating oils to improve the dispersancy and the viscosity index of the oil.

Dwg.0/0

3/AB/15 (Item 10 from file: 351)
DIALOG(R)File 351:Derwent WPI
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008718932

WPI Acc No: 1991-222951/199130

XRAM Acc No: C91-096900

Chemically modified cellulose fibre for wet-laying paper-making - provides highly absorbent paper prods. including disposable paper towels

Patent Assignee: PROCTER & GAMBLE CO (PROC)

Inventor: BARCUS R L; BJORKQUIST D W

Number of Countries: 022 Number of Patents: 016

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9110010	A	19910711				199130	B
US 5049235	A	19910917	US 89458011	A	19891228	199140	
AU 9171819	A	19910724				199143	
FI 9202933	A	19920624	WO 90US7392	A	19901220	199239	
			FI 922933	A	19920624		
EP 507875	A1	19921014	WO 90US7392	A	19901220	199242	
			EP 91903094	A	19901220		
BR 9007968	A	19921013	BR 907968	A	19901220	199246	
			WO 90US7392	A	19901220		
JP 5503553	W	19930610	WO 90US7392	A	19901220	199328	
			JP 91503261	A	19901220		
AU 651332	B	19940721	AU 9171819	A	19901220	199432	
EP 507875	A4	19930107	EP 91903094	A	19910000	199524	
EP 507875	B1	19950607	WO 90US7392	A	19901220	199527	
			EP 91903094	A	19901220		
DE 69019987	E	19950713	DE 619987	A	19901220	199533	
			WO 90US7392	A	19901220		
			EP 91903094	A	19901220		
ES 2073737	T3	19950816	EP 91903094	A	19901220	199539	
IE 66455	B	19951227	IE 904714	A	19901228	199609	
CA 2072746	C	19960130	CA 2072746	A	19901220	199616	
FI 102626	B1	19990115	WO 90US7392	A	19901220	199908	
			FI 922933	A	19920624		
JP 2974771	B2	19991110	WO 90US7392	A	19901220	199953	
			JP 91503261	A	19901220		

Priority Applications (No Type Date): US 89458011 A 19891228

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9110010 A 47

Designated States (National): AU BR CA FI JP KR

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU NL SE

US 5049235 A 16

EP 507875 A1 E 47 D21H-011/20 Based on patent WO 9110010

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL SE

BR 9007968 A D21H-011/20 Based on patent WO 9110010

JP 5503553 W 18 D21H-011/20 Based on patent WO 9110010

AU 651332	B	D21H-011/20	Previous Publ. patent AU 9171819 Based on patent WO 9110010
EP 507875	B1 E 25	D21H-011/20	Based on patent WO 9110010
Designated States (Regional): AT			BE CH DE ES FR GB IT LI SE
DE 69019987	E	D21H-011/20	Based on patent EP 507875 Based on patent WO 9110010
ES 2073737	T3	D21H-011/20	Based on patent EP 507875
FI 102626	B1	D21H-017/20	Previous Publ. patent FI 9202933
JP 2974771	B2 17	D21H-011/20	Previous Publ. patent JP 5503553 Based on patent WO 9110010
FI 9202933	A	D21H-000/00	
IE 66455	B	D21H-011/20	
CA 2072746	C	D21H-011/20	

Abstract (Basic): WO 9110010 A .

A chemically modified fibre (I) having water absorbing and retention value (WAARV) 15-100 g/g comprises (a) cellulose fibre selected from (mixts.) chemithermomechanical pulp fibre, (un)bleached soft-/hard-wood Kraft/sulphite pulp fibre, cotton linters and (un)mercerised dissolving pulp fibre; (b) poly(methylvinylether-co-maleate) 1:1 copolymer having Mn 39000-80000; and (c) polyol, where wt. ratio (b):(c) is 250:1-3:1 and wt. ((b)+(c)) per unit wt. (a) is 0.3-2, pref. 0.8-1.2 (wt. (b) on acid equiv. basis).

Also claimed are cellulosic papermaking pulp contg. (I); prepn. (I) by thermally crosslinking at 100-140, pref. 125-130 deg.C for 12-3, pref. 11-5 mins, starting material pulp (a) with an intimate mixt. of (b) and (c); wet-laid paper web contg. 5-60, pref. 10-60 wt.% (I); and disposable absorbent articles contg. ply(s) of such a web.

USE/ADVANTAGE - Modified fibres suitable for wet-laying papermaking provide highly absorbent paper for use in disposable paper towels/diapers/dressings. (47pp Dwg.No.0/0

Abstract (Equivalent): EP 507875 B

A chemically modified fibre having a water absorbency and retention value in the range from 15 g/g to 100 g/g characterised by chemically bonded together; (a) a cellulosic fibre selected from the group consisting of chemithermo-mechanical pulp fibre, bleached hardwood Kraft pulp fibre, bleached softwood Kraft pulp fibre, unbleached hardwood Kraft pulp fibre, unbleached softwood Kraft pulp fibre, bleached softwood sulphite pulp fibre, bleached hardwood sulphite pulp fibre, unbleached softwood sulphite pulp fibre, unbleached hardwood sulphite pulp fibre, cotton linters, mercerised dissolving pulp fibre unmercerised dissolving pulp fibre, and mixtures thereof; (b) a poly(methyl vinyl ether-co-maleate) 1:1 copolymer having a number average molecular weight in the range from 39,000 to 80,000, and (c) a polyol; wherein the proportion by weight of said poly(methyl vinyl ether-co-maleate) copolymer to said polyol is from 250:1 to 3:1 and the weight of said poly(methyl vinyl ether-co-maleate) copolymer plus said polyol per unit weight of said cellulosic fibre, (a), is in the range from 0.3 to 2, preferably from 0.8 to 1.2, the poly(methyl vinyl ether-co-maleate) copolymer weight being expressed on an acid equivalent basis.

Dwg.0/1

Abstract (Equivalent): US 5049235 A

Chemically-modified fibre comprises a chemically-bonded mixt. of (a) cellulosic fibre, (b) poly(methyl vinyl ether-co-maleate) 1:1 copolymer of mol. wt. 39,000-80,000 and (c) PVA, propylene glycol, glycerin, pentaerythritol or HO(CH₂CH₂O)_nH, where n is 1-154. Wt. ratio (b):(c) is 250-3:1 and (b)+(c):(a) is 0.3-2 w.r.t. acid equiv. of (b).

Cpd. (c) comprises e.g. chemithermomechanical pulp fibre, bleached hardwood kraft pulp fibre, bleached softwood kraft pulp fibre, unbleached hardwood kraft pulp fibre etc.

ADVANTAGE - Has water absorbency and retention value of 15-100g per g. (16pp)

3/AB/16 (Item 11 from file: 351)
 DIALOG(R) File 351: Derwent WPI
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007580280

WPI Acc No: 1988-214212/198831

XRAM Acc No: C88-095495

Sodium carboxymethyl cellulose prepn. - using frota-pulper to pretreat and homogenise the cellulose pulp and reaction medium

Patent Assignee: MEISA-SERLA OY (METC-N); METSA-SERLA OY (METS-N)

Inventor: EDELMAN K; LINDROOS T

Number of Countries: 009 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 276797	A	19880803	EP 88101029	A	19880125	198831 B
JP 63199701	A	19880818	JP 8815687	A	19880126	198839
NO 8800333	A	19880822				198839
DK 8800335	A	19880728				198841
US 4941943	A	19900717	US 88148951	A	19880127	199032

Priority Applications (No Type Date): FI 87360 A 19870127

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 276797 A E 5

Designated States (Regional): DE FR GB NL SE

Abstract (Basic): EP 276797 A

Cellulose to be used for making sodium carboxy-methyl cellulose is pretreated by slushing it into the reaction medium until a consistency of 5-15%, pref. 5-10% is obtd. following which the fibre suspn. is thickened until a consistency of 20-35% is obtd. The pulp contg. reaction medium thus obtd. is homogenised using a frota-pulper in order to increase its reactivity. The mercerisation, which activates the cellulose, is carried out after thickening and/or homogenisation and the cellulose thus pretreated etherified in known manner.

USE/ADVANTAGE - The cellulose pretreatment process increases the reactivity of the cellulose, so that lesser amts. of chemicals are reqd. to produce end prods. of good quality. Consequently, smaller reactors are reqd. and a smaller distilling capacity is reqd. for generating solvents.

0/1

Abstract (Equivalent): US 4941943 A

The prepn. of sodium carboxymethyl cellulose comprises: (a) conducting a pretreatment including (i) slushing cellulose into a reaction medium until a fibre suspension having a consistency of 5-15% is achieved; (ii) thickening the suspension until a pulp contg. reaction medium of consistency 20-35% is achieved; (iii) homogenising the medium using a screw conveyor having a screw pitch which decreases from an inlet opening towards an outlet opening, to increase the reactivity of the pulp; and (iv) after (iii) mercerising the pulp to activate the cellulose; and (b) etherifying the cellulose. USE - Prepn. of sodium carboxymethyl cellulose.

(4pp)

3/AB/17 (Item 12 from file: 351)

DIALOG(R)File 351:Derwent WPI
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004076785

WPI Acc No: 1984-222326/198436

XRAM Acc No: C84-093668

Dyeing textile goods contg. blend of cellulose and polyamide fibre -
comprises treating fibre with halogenated aromatic cpd. contg. sulphonic
acid (salt) gps. before or during dyeing

Patent Assignee: TOYOCO KK (TOYM)

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 59130388	A	19840726	JP 835135	A	19830114	198436 B
JP 91068150	B	19911025	JP 835135	A	19830114	199147

Priority Applications (No Type Date): JP 835135 A 19830114

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 59130388	A	3		

Abstract (Basic): JP 59130388 A

Textile goods are treated with a halogenated aromatic cpd. having
sulphonic acid and/or sulphonic acid salt gp. before or during dyeing
with a dye having affinity for cellulose fibre.

The halogenated aromatic cpds. are sulphonated bis (chlorophenyl)
ether, (aldehyde condensate of) sulphonated product of halogenated
phenol or deriv. thereof, etc. and pref. cpd. is of formula (I), where
M is H, alkali metal or ammonium gp. The cpd. is used in 0.1-5, pref.
0.2-3% based on the weight of natural polyamide fibre. The cellulose
fibres are cotton, linen, regenerated cellulose, cuprammonium rayon,
etc. and they may be mercerised by etherisation or esterification
of a part of hydroxyl gps. The natural polyamide fibres include wool,
alpaca wool, camel hair, mohair wool, etc. and they may be subjected to
non-shrink treatment, pref. by oxidation with active chlorine cpd. The
dyes include reactive and direct dyes and those for natural polyamide
fibre are acid and reactive dyes. The natural polyamide fibre may be
left undyed.

ADVANTAGE - Staining of natural polyamide fibre with dye for
cellulose fibre is prevented and the textile goods are dyed in bright
colours

3/AB/18 (Item 13 from file: 351)

DIALOG(R)File 351:Derwent WPI

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003895477

WPI Acc No: 1984-041019/198407

XRAM Acc No: C84-017425

XRPX Acc No: N84-030984

Cellulose pulp mercerising with sodium hydroxide soln. - involves
simultaneous treatment with alternating electromagnetic field to increase
cellulose reactivity

Patent Assignee: LENINGRAD FORESTRY ACAD (LENL)

Inventor: DAURANOVA O A; PERMINOVA M I; PILNIKOV V P

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1008320	A	19830330	SU 3314593	A	19810713	198407 B

Priority Applications (No Type Date): SU 3314593 A 19810713

Patent Details:

Patent No	Kind	Lan	Pg	Main	IPC	Filing	Notes
SU 1008320	A		3				

Abstract (Basic): SU 1008320 A

The electromagnetic treatment involves freq. of oscillation 20-1000 Hz. As previously, the mercerisation is realised by treating the cellulose pulp with 18-40% NaOH soln. The proposed method may be used in the mfr. of cellulosic prods., e.g. artificial silk, cord, cellulose ethers etc.

Typically, prehydrolysed sulphate cord pulp is treated for 10 mins. in 18% NaOH soln. using inert graphite electrodes, current density 1.2 A/sq.cm. and alternating current freq. 20 Hz. The mercerised prod. is sepd. from excess alkali before converting into viscose soln. by treating with CS₂. The proposed and prototype method respectively gave time of retardation of viscose soln. 45 and 72 secs. Bul.12/30.3.83

Dwg.0/0

3/AB/19 (Item 14 from file: 351)

DIALOG(R) File 351:Derwent WPI

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003693567

WPI Acc No: 1983-53548K/198322

XRAM Acc No: C83-052109

XRPX Acc No: N83-095918

Cellulose ether prodn. active alkali soln. prepn. control appts. - has outputs from spent soln. flow-rate meter and spent soln. concn. meter to computing unit with output to adder connected to regulator

Patent Assignee: SYNTH RESIN RES INS (SYNT-R)

Inventor: PAVLOV D A; PETROV Y U F

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 944625	B	19820723				198322 B

Priority Applications (No Type Date): SU 3224960 A 19801224

Patent Details:

Patent No	Kind	Lan	Pg	Main	IPC	Filing	Notes
SU 944625	B		3				

Abstract (Basic): SU 944625 B

Active alkali soln. prepn. control appts. contg. a level (4) and active soln. concn. (12) regulators and spent soln. (5) and fortifying soln. (6) feed valves has greater accuracy in regulating active alkali soln. concn. for use in prodn. of cellulose ethers in the mercerisation stage in the chemical industry. Introduction of a spent soln. flow rate meter (10), fortifying soln. flow rate regulator (11), computing unit (13), spent soln. concn. meter (14) and adder (15) permits effective control in the presence of spent soln. flow rate and concn. disturbances.

The active alkali soln. is prepd. in a mixer (1) for spent soln. from the mercerisation stage and fortifying soln. from the prepn. stage. The mix is pumped to the mercerisation stage. The computing unit continuously receives signals proportional to the spent soln. flow-rate and concn. and fortifying soln. flow-rate.

The required fortifying soln. flow-rate is calculated continuously from a material balance equation. If the spent soln. concn. or

flow-rate varies, a new fortifying soln. flow-rate is computed by way of compensating the disturbance. Bul.27/23.7.82.

Dwg.1/1

3/AB/20 (Item 15 from file: 351)
 DIALOG(R)File 351:Derwent WPI
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003453964

WPI Acc No: 1982-06764E/198204

CMC etherification - by reacting with ethyl halide in presence of alkali hydroxide

Patent Assignee: KOHJIN CO LTD (KOJK)

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 56161401	A	19811211	JP 8063997	A	19800516	198204 B
JP 84041644	B	19841008				198444

Priority Applications (No Type Date): JP 8063997 A 19800516

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 56161401	A		5		

Abstract (Basic): JP 56161401 A

Etherification of CMC comprises reacting CMC with ethyl halide in the presence of alkali hydroxide. The concn. of alkali hydroxide aq. soln. in the mercerisation of CMC is 40-50 wt.%. Ratio of alkali hydroxide aq. soln. in the mercerisation of CMC is 2-4 times by wt. to CMC. The etherification reaction is carried out at 130-150 deg.C. Pref. for 0.5-6 hrs. The first etherification is carried out at 130-150 deg.C for 0.5-6 hrs. and the second etherification is carried out at 50-120 deg.C for 1-6 hrs. The amt. of etherification agent (alkyl halide) used is reduced and side reaction (decomposition of cellulose) is controlled. Carboxymethylethylcellulose of good transparency, smoothness and strength is obtd. in high yield and is useful for coating tablets.

3/AB/21 (Item 16 from file: 351)
 DIALOG(R)File 351:Derwent WPI
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003233331

WPI Acc No: 1981-93891D/198151

Etherification of mercerised carboxymethylcellulose granules - by dissolving CMC in caustic alkali soln., kneading to mercerise, then reacting with etherifying agent

Patent Assignee: KOHJIN CO LTD (KOJK)

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 56143201	A	19811107	JP 8046780	A	19800411	198151 B
JP 84041641	B	19841008				198444

Priority Applications (No Type Date): JP 8046780 A 19800411

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 56143201	A		6		

Abstract (Basic): JP 56143201 A

Method comprises dissolving CMC in 30-70% aq. soln. of caustic alkali, kneading the soln. at 10-60 deg.C. to give soft granules of mercerised CMC, then reacting, with etherifying agent.

A soln. of 208 g. CMC (degree of substitution 0.42, viscosity in 1% aq. soln. at 25 deg.C of 90 cPs) in 540 g. of 48% aq. soln. of NaOH is kneaded at 48 deg.C or below for 1 hr.; 374 g. of the mercerised CMC granules, ca. 1 mm. in size, is reacted with 212 g. ethylchloride in 400 g. toluene with vigorous stirring at 110-120 deg.C for 18 hrs. The CMC ethylether obtd. has degree of ethoxy substitution of 2.20, is readily soluble in 80/20 mixt. of ethanol/water, and gives tough, clear film. The method gives mercerised CMC of uniform alkali distribution and high reactivity in the form of granules of 1 mm. or less in particles size, which can be etherified uniformly at high reaction rate.

3/AB/22 (Item 17 from file: 351)

DIALOG(R)File 351:Derwent WPI

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002552677

WPI Acc No: 1980-70702C/198040

Mergerising CMC to obtain soft powder - by dissolving in alkali, adding hydrogen peroxide and kneading obtd. mixt.

Patent Assignee: KOHJIN CO LTD (KOJK)

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 55110102	A	19800825				198040 B
US 4250305	A	19810210				198109
JP 84028321	B	19840712				198432

Priority Applications (No Type Date): JP 7916100 A 19790216; JP 78106312 A 19780901; JP 78161114 A 19781228; JP 7915487 A 19790215

Abstract (Basic): JP 55110102 A

The process comprises dissolving CMC in 30-70wt.% caustic alkali aq. soln., adding H2O2 to the soln. and kneading the mixt. at 10-60 degrees C to obtain uniform and low viscosity mercerised CMC in the form of soft powder.

The obtd. soft powder is reacted with etherifying agent to etherify CMC to obtain low viscosity cellulose ether. The dipping-squeezing-grinding-aging process in the conventional mercerising process can be carried out in one process in a short time. As mercerising can be carried out by adding water and alkali, which are just sufficient for the following etherifying reaction, process control is very easy. Grinding is unnecessary, mercerising is performed uniformly and the etherifying reaction proceeds uniformly.

3/AB/23 (Item 18 from file: 351)

DIALOG(R)File 351:Derwent WPI

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001846213

WPI Acc No: 1977-67226Y/197738

Alkaline cellulose having increased reactivity - prepd. from cellulose raw material contg. added organic cpds. e.g. lecithin derivs.

Patent Assignee: KEMIRA OY (KEMH)

Number of Countries: 014 Number of Patents: 015

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2710309	A	19770915				197738 B
SE 7702670	A	19771003				197742
NO 7700836	A	19771010				197744
FI 7600623	A	19771031				197746
JP 52128983	A	19771028				197749
FR 2343753	A	19771110				197801
DD 128953	A	19771221				197810
GB 1553134	A	19790919				197938
US 4210747	A	19800701				198029
CA 1084913	A	19800902				198038
CS 7701585	A	19820827				198305
SU 957772	A	19820907				198330
AT 7701565	A	19831015				198346
IT 1073485	B	19850417				198540
JP 87005921	B	19870207				198709

Priority Applications (No Type Date): FI 76623 A 19760310

Abstract (Basic): DE 2710309 A

Alkali cellulose is produced from a cellulose raw material prepd. by alkaline cooking, without pre-hydrolysis and/or acid cooking and without alkaline finishing, provided cellulose, mercerising soln. and/or alkali cellulose is admixed with at least one organic cpd., e.g. alcohol, ester, ether, ketone, amine, acid or its Na salt, imine or 4+C aliphatic hydrocarbon.

Alkali cellulose reactivity can be increased sufficiently to allow prepn. of alkali cellulose for viscose prodn. by mercerising paper sulphate pulp. When using viscose pulp as raw material for viscose prodn., CS2 quantity can be reduced to 20-30% of alpha-cellulose quantity. NaOH content can also be reduced.

3/AB/24 (Item 19 from file: 351)
 DIALOG(R) File 351: Derwent WPI
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001199965

WPI Acc No: 1974-73854V/197442

Cellulose alkoxyalkyl ethers - cellulose treated with alkylating and hydroxyalkylating agents

Patent Assignee: ANDREEV YU D ET AL (ANDR-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 410030	A	19740429				197442 B

Priority Applications (No Type Date): SU 1694456 A 19710812

Abstract (Basic): SU 410030 A

In the title prepn. mercerised cellulose is treated with a circulating gaseous mixt. of reagents, under press. the technology being simplified and reaction time reduced using an alkylating agent/anhydroglucose unit ratio 0.16-0.65 and a hydroxyalkylating/anhydroglucose unit ratio 0.0014-0.011, at 0.5-3 atm. Reaction is much faster than when similarly treating cellulose with MeCl + propene oxide at high press. with a large excess of reagents. Suitable alkylating reagents are alkyl halides, suitable hydroxyalkylating ones are alkene oxides. Mercerised cellulose contg. 1.5-3 times its wt. 30-45% NaOH soln. is treated at 55-140

degrees C/0.5-3 atm. is not >4 atm.

3/AB/25 (Item 20 from file: 351)
 DIALOG(R)File 351:Derwent WPI
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001195899

WPI Acc No: 1974-69784V/197440

Gypsum additives obtd by acid treatment of impure cellulose ethers -
 GIVING A PLASTER WITH IMPROVED WATER RETENTION AND LONGER SETTING TIME
 Patent Assignee: BEROL KEMI AB (BERP); MODOKEMI AB (MOOC)
 Number of Countries: 006 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2411028	A	19740926				197440 B
SE 7303581	A	19741021				197446
FR 2221419	A	19741115				197502
US 3936313	A	19760203				197607
GB 1453381	A	19761020				197643
CA 1008476	A	19770412				197717
DE 2411028	B	19770707				197728

Priority Applications (No Type Date): SE 733581 A 19730314

Abstract (Basic): DE 2411028 A

Addn. of acid, pref. phosphoric, succinic, lactic, tartaric, gluconic and esp. citric, to cellulose ethers which contain NaOH or KOH impurities, introduced during prepn. of starting cellulose by mercerisation, produces material which, when added in amt. of 0.1-1.5 (pref. 0.2-0.5) wt. % to gypsum, produces a plaster with improved water retention and longer setting time. Cellulose ethers are pref. non-ionic and partic. ethyl hydroxyethyl hydroxypropyl cellulose and hydroxyethyl hydroxypropyl cellulose.

acidic is added in amt. to neutralise alkali content of ether and to give ratio 20:1 or 1:1 or ether to salt retarder.

3/AB/26 (Item 21 from file: 351)
 DIALOG(R)File 351:Derwent WPI
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000941990

WPI Acc No: 1973-19222U/197314

Cellulose esters/ ethers prepn - by stirring reaction mass by centrifugla force

Patent Assignee: MOSCOW IM GUBKINA PETROLE (MOS -N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 333842	A					197314 B

Priority Applications (No Type Date): SU 1439316 A 19700522

Abstract (Basic): SU 333842 A

A mixt. of cellulose and alkylating and/or esterifying agents is stirred for 5-300 secs. under a polar centrifugal force to give good mixing. The reaction time is much shorter c.f. 4-5 hrs for prior art processes. In an example, alkaline cellulose (from mercerisation) is reacted with Na monochloroacetate (1:1.8 molar ratio resp.) whilst stirring under centrifugal force for 30 secs. to give

carboxymethylcellulose (85% substd. and water insol. content 0.05%).

3/AB/27 (Item 22 from file: 351)
DIALOG(R) File 351:Derwent WPI
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000761236

WPI Acc No: 1971-02850S/197102

Reinforcing paper with carboxymethyl cell- - ulose

Patent Assignee: ASAHI CHEM IND CO LTD (ASAH)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 71000406	B					197102 B

Priority Applications (No Type Date): JP 6822357 A 19680405

Abstract (Basic): JP 71000406 B

A carboxymethyl cellulose is added to the surface of the paper. The cellulose is a white fine powdery substance having 40-1 mu particle size. This cellulose crystal coagulation substance is subjected to mercerisation and etherifying to prepare a carboxymethyl cpd. having 0.2-0.4 substitution ratio. The carboxymethyl cpd. is dispersed in water and applied to the surface of paper by coating or spraying. The paper is dipped in or sprayed with an aluminium sulphate soln. to form an etherified cellulose coagulation substance. The etherified cpd. may be added to a pulp stock.

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